

WHAT IS CLAIMED IS:

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A1 } 1. A method for operating a load-dependent power-generating system which supplies electrical energy to at least one electric drive motor in a vehicle, comprising:

determining a performance setpoint value for the electric drive motor (2) from an accelerator pedal position; and

making a power request to the power-generating system before a torque request to the drive motor;

wherein the accelerator pedal movement is additionally used to calculate the performance setpoint value.

2. The method according to Claim 1, wherein rotational speed of the electric drive motor at a given time, and the setpoint torque of the electric drive motor at the given time, are additionally used to calculate the performance setpoint value.

3. The method according to Claim 2, wherein said step of determining a performance setpoint value comprises:

generating a predictive rotational speed of the electric drive motor based on at least one of the accelerator

pedal movement and the accelerator pedal position, and based on the rotational speed of the electric drive motor at a given time; generating a predictive setpoint torque of the electric drive motor based on at least one of accelerator pedal movement and accelerator pedal position, and based on the setpoint torque of the electric drive motor at the given time; and

determining the performance setpoint value from the predictive rotational speed and the predictive setpoint torque using a corresponding characteristic diagram.

4. The method according to Claim 1, wherein:

a predictive voltage of the power-generating system is generated from the performance setpoint value; and

a power setpoint value is determined from the performance setpoint value and the predictive voltage of the power-generating system.

5. The method according to Claim 1, further comprising:

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determining a power correction value from the dynamics of the torque setpoint value of the electric drive motor; and

summing the power correction value with the power

setpoint value for the power-generating system.

6. The method according to Claim 1, wherein:

the power consumption of the electric drive motor at a given time is determined and fed to a comparison point of a control loop as a setpoint value;

actual power which is made available by the power-generating system is determined and is fed to the comparison point of the control loop as an actual value;

the comparison point forms the difference between the power drain of the electric drive motor at the given time and the power made available by the power-generating system; and

when there is a positive difference, a first controller increases the power setpoint value of the power-generating system.

7. The method according to Claim 6, wherein when there is a positive difference a second controller reduces the torque setpoint value of the electric drive motor.

8. The method according to Claim 6, wherein the first controller comprises a P controller with a delay element of the first order connected upstream.

9. The method according to Claim 7, wherein the second controller comprises a PI controller.

10. The method according to Claim 7, wherein the parameters of the second controller are dependent on rotational speed of the electric drive motor at a given time.

11. The method according to Claim 1, wherein a fuel cell system is used as power-generating system.